| Work Orde February-21-13 | | 6 | | *977 | | | | Page 1 | | | | |
|--------------------------------|---------------|-----------------------------------|---|----------------------|-----------------------------------|--------|--------------|---------------|-------------------|------------------|----------------|----------|
| Revision ID: Item Name: | | tart Qty: 4.00 Req'd Qty: 4.00 | *4* *4* | Accept | *N900 Cust Item I Customer: | | 100 |)* s | etup Star Stop | i VI - | S1* S2* | Series. |
| Approvals: | Process Plan: | MLJ | Date: /3-02-7 | Tooling: | Ds | ate: | | R | un Star | | R1* | |
| | | • | Date: | | D: | ate: | | | Stop | ` *N | R2* | |
| Sequence ID/ Work Center ID | | peration escription | | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp | |
| Draw Nbr | Revisio | on Nbr | | | | | | | | | | |
| D3914 | В | | | | | | | | | | | |
| *100 | | | | 0.00 | | | | XIZ | 13 | 3-05 | -01 | MAL |
| Large Fab Large Fab | | | as per dwg D3914 d remove identification m | • | | | | | | | | |
| 110 | Q | C6- Inspect dimension | ns to drawing | 0.00 | > | | | id | A | 'Y 13- | 05 ·02 | |
| *110* QC Quality Control | | Memo | | 0.00 | | | | | 1 | | | |
| | | | | | | | | 12 | A | ly is | 3.05·C | 2 |
| *120 | · fd | | tock Location: | 0.00 | | | | , 0. | | | | * |
| Packaging | | Momo | | 0.00 | | | | | | | | |

Memo

Packaging

| | | | | | | | | | | | DQA: | Da | ite: | |
|---------------|-------------|------------|-----------|-----------|----------------------------|----------|--------------|------------------|------------|----------|--------------|---------------|-------------------|---------------------------------------|
| NCR: Y | es / N | o | | | WORK ORDER NON-O | COI | VFORM | MANCE / UP | DATE | | · | | | |
| | - | | | | | | | | | _ | QA Closed: | Da | ite: | · · · · · · · · · · · · · · · · · · · |
| Mark Onde | | | | | DISPOSITION | | | | AGAINST [|)E | PARTMENT | PROCESS | | |
| Work Orde | er | | ·/· ····· | | Rework | 7 | | Skid-tube | Crosstube | \neg | | Water Jet | | Engineering |
| Part N | lo. | | | | Scrap | 1 | Ī. | Machining | Small Fab | \dashv | Pro | d. Eng. Coor. | \longrightarrow | Quality |
| raiti | ··· | | | | Use-as-is | 1 | 1 | noforming | Finishing | | | e/Packaging | \vdash | Other |
| NCR N | ۱o. | | | | Work Order Update | 1 | 1 | Large Fab | Composite | | • | Supplier | $\overline{}$ | |
| | | | | | | | | | | | | | _ | |
| Root | | | | Descri | ption of work order update | | Initial | Ac | tion | | Sign & | | | |
| Cause | Dat | e Step | Qty | , | or Non-conformance | Ct | nief Eng | Desc | ription | | Date | Verificatio | n | QC Inspector |
| Doc/Data | | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | , | | |
| Operator | | · · | | | | | | | | İ | | | | |
| Material | | | | | | | | | | • | | | ļ | |
| Setup | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | |
| Process | | | · | | | | | | | | | : | ł | |
| Supplier | | | | | | | | | | | | | | |
| Training | | | 1 | | | | | | | | | | | |
| Unapproved | | | | ļ <u></u> | | <u> </u> | | | | | <u> </u> | | | |
| | | | | | | AUI | LT CATE | GORY | | | | | | |
| Landi | ng Gear | | | _ | General | | 1 | | г | _ | 1 | | _ | 1- /- / |
| | Bendi | _ | | _ | Bend | _ | Grain | | ļ | | Ovalized | | - | Pressure/Forced |
| | \vdash | Not Conce | entric to | O/S | BOM/Route | <u></u> | Hardwa | | } | | Over/Under | | \vdash | Temperature/Cure |
| | Cracks | | | <u> </u> | Broken/Damaged | - | - 1 ' | on Incomplete | , <u> </u> | | Part Incorre | | \vdash | Weld |
| | | ed/Crimped | i. | _ | Burrs | <u> </u> | - | ions Incomplete, | /Unclear | _ | Part Lost/M | ssing | | Wrong Stock Pulled |
| 1 | Cuffs | | | i | Contamination | | Mainte | enance | | | Part Moved | | | |

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

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| Work Orde February-21-13 | | | | *977 | 706* | | | | | | | Page | 2 |
|--------------------------------|---------------------|--|--------------------|----------------------|-----------|--------|--------------|---------------|-------|---------------|------------------|----------------|----------|
| Revision ID: Item Name: | D3914-7 Rib 3/08/13 | Start Qty: 4.00 | *4* | Accept | *N900 | | 100 | * | Setup | Start Stop | | S1* S2* | |
| Required Date: Reference: | | Req'd Qty: 4.00 | *4* | | Customer: | | | | | | | | |
| Approvals: | Process QC: | Plan: | Date: | Tooling: SPC (Y/N): | | ate: | | | Run | Start Stop | • • | R1* R2* | |
| Sequence ID/ Work Center II |) | Operation Description QC21- Final Inspection - | Work Order Release | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Qt | y I | Reject Number | Insp. Stamp | |
| *130* QC Quality Control | | Memo | | 0.00 | | | | | 4 L= | 5 | 13-0 | 15-06 | <u> </u> |

N 13-05-3

| | | | | | | | | | | | DQA: | Date: | , 🔻 |
|---------------|------------|-------------------|----------|---------------------------------------|----------------------------|---------------|-------------|--------------------------------|--|----------|---------------|---------------|----------------------|
| NCR: | res / No | | | | WORK ORDER NON- | coi | VFORM | MANCE / UP | DATE | | - | | |
| | | 3 | | | | | | | | | QA Closed: | Date: | |
| | | | | | DISPOSITION | | | , | AGAINST | DE | PARTMENT/ | PROCESS | |
| Work Orde | er: | | | | Rework | ٦ | | Skid-tube | Crosstube | <u> </u> | 1. | Water Jet | Engineering |
| Part N | ula. | | | | Scrap | 1 | | Machining | Small Fab | - | 4 | d. Eng. Coor. | Quality |
| Faiti | v O | | | · · · · · · · · · · · · · · · · · · · | Use-as-is | 1 | | noforming | Finishing | ├ | 4 | e/Packaging | Other |
| NCR 1 | No. | | | | Work Order Update | 1 | • | Large Fab | Composite | - | 1 | Supplier | |
| | | | | | | _ | | | | | | | |
| Root | | | | Descri | ption of work order update | | Initial | | tion | | Sign & | | |
| Cause | Date | Step | Qty | | or Non-conformance | Ch | ief Eng | Desc | ription | | Date | Verification | QC Inspector |
| Doc/Data | | | | | * . | - | | | | | | | |
| Equip/Tooling | | | | | | ' | | | | | | * | |
| Operator | | | | | | | | | | | | | |
| Material | | | | | | | | | • | | | • | <u> </u> |
| Setup | | | | | | | | | 4 | | | | |
| Other | | | | | | | | | r | | | | |
| Process | | | | | | | | | | | | | |
| Supplier | | 1 | | | , | İ | | | | | | | |
| Training | Н .: | | | | | | | | | | | | |
| Unapproved | <u> </u> | ٠ | 1 | <u> </u> | | | T CATE | CORV | ······································ | | <u> </u> | | 1 |
| Landi | | | · | | General | AUI | . I CATE | GURT | <u>. N. j.</u> N. M. | | | | |
| Landi | ng Gear | | | | Bend | $\overline{}$ | Grain | | - | | Ovalized | _ | Pressure/Forced |
| | Bending | la t Camaa | | 0/5 | BOM/Route | \vdash | Hardwa | ** | | \vdash | 4 | tolerance : | Temperature/Cure |
| | — | ot Conce | ntric to | ^{0/5} - | ⊣ | \vdash | -{ | | | - | Part Incorred | . — | Weld |
| | Cracks | /Crimonod | | | Broken/Damaged | \vdash | 4 ` | on Incomplete ions Incomplete, | /Uncloar | \vdash | Part Incorrec | <u> </u> | Wrong Stock Pulled |
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| | Cuffs | a+ | | | Contamination Countersink | \vdash | Mislabe | | | - | Positioned V | Vrong | |
| i | Heat Tre | αι | | i | Countersink | 1 | Livitatione | ieu | | 1 | L ositioned A | vi Olig | _ |

Misread Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Other

Power Loss/Surge

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Folio

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February-21-13 12:41:07 PM

Work Order ID:

97706

Parent Item:

D3914-7

Parent Item Name:

Rib

Start Date: 3/08/13

Required Date: 3/11/13

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP Rev:A new issue DD 10.03.19 verified by:EC

IPP Rev:B as per dwg revB DD

IPP Rev:C 11.01.18 chg qc5 to 6 DD verf:EC 10.08.18 verified by:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|------------------------|----------------------|---------------------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M304TS0.500W.049 Square Tubing | | Purchased | No | | | 100 | f | 801.7795 | 7.875 | 33.157895 | | | |
| oquate ruomg | | | | Location | | Loc Qty | <u>Lo</u> | c Code | | | | | |
| | | | | WA006 | 8460 | 801.7794890 0.00001534 | | | | | | | |
| | ٠ | | Ü | $94.5^{\frac{12}{12}}$ | 1808 2938) - 1134 | 0.07 257 544.709474 | ~ a | | 90 | 4.5 | 13-0 | 75-01 | m |

| Water Jet Engineering Prod. Eng. Coor. Quality Store/Packaging Supplier Other |
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| Water Jet Engineering Prod. Eng. Coor. Quality Store/Packaging Other Supplier |
| Prod. Eng. Coor. Quality Store/Packaging Other Supplier |
| Supplier |
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| |
| e Verification QC Inspector |
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| Pressure/Forced Temperature/Cure Weld t/Missing Wrong Stock Pulled wed wed wed wed wed wed wed wed wed w |
| d no |

Out of Calibration

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

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